

Abstract of the Disclosure

A turbo shaft engine for amplifying an air stream flow rate includes a turbine fan assembly and gas generator. The gas generator includes a primary air duct defining intake and outlet ports. A combustion chamber is connected to the primary air duct for igniting an
5 admixture of fuel and a portion of the intake flow to form an energized motive flow. The motive flow is discharged from the combustion chamber back into the primary air duct over a Coanda-profiled guide member so as to amplify the flow rate of incoming intake flow by momentum transfer. A portion of the motive flow is returned directly to the fan assembly for amplifying incoming intake flow. The remaining motive flow is again combusted and used to
10 rotate turbine blades. A resonance chamber with volume adjustment is included for tuning a pulse of intake flow into the primary combustion chamber.